

Amendments to the Claims

Please cancel Claims 9-14 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1 and 2, and add new Claims 15-19 to read as follows.

Note that all the claims currently pending in this application, including those not presently being amended, have been reproduced below.

1. (Currently amended) An ink jet recording method for conveying a recording medium onto a platen disposed to face a recording head for executing recording by discharging recording liquid droplets, to perform recording, comprising the steps of:

providing rib rows each including a plurality of ribs in a direction intersecting a conveying direction of the recording medium, the ribs of one rib row being ~~disposed to be different~~ arranged differently from ~~one~~ ribs of another rib row, and disposing at least two rib rows on the platen separated in the conveying direction of the recording medium; and

completing predetermined one-line recording by performing recording except for recording data corresponding to a position of each rib at each of at least the two rib rows when a recording operation is performed on a leading end or a rear end of the recording medium in the conveying direction thereof.

2. (Currently amended) An ink jet recording apparatus for performing recording by conveying a recording medium onto a platen disposed to face a recording head for executing recording by discharging recording liquid droplets, comprising:

at least two rib rows disposed on the platen along a conveying direction of the recording medium, each rib row including a plurality of ribs in a direction intersecting the conveying direction of the recording medium, the ribs of one rib row being ~~disposed to be different~~ arranged differently from ~~one~~ ribs of another rib row,

wherein predetermined one-line recording is completed by performing recording except for recording data corresponding to a position of each rib at each of said at least two rib rows when a recording operation is performed on a leading end or a rear end of the recording medium in the conveying direction thereof.

3. (Previously amended) An ink jet recording method for conveying a recording medium between a recording head for executing recording by discharging recording liquid droplets and a platen disposed to face the recording head, to perform recording, comprising the steps of:

dividing a discharge nozzle row of the recording head into at least two portions of a first nozzle row on the downstream side with respect to a conveying direction of the recording medium, and a second nozzle row on the upstream side with respect to the conveying direction of the recording medium;

using a platen including at least two rib rows separated in the recording medium conveying direction, each rib row having a plurality of ribs arrayed in a direction

B34
(cont'd)

intersecting the recording medium conveying direction, the at least two ribs rows being divided near positions opposite a dividing line for dividing the first and second nozzle rows, and each rib of one rib row being disposed in a position between adjacent ribs of the other rib row;

B34
(cont'd)

executing two stages at least once each when a recording operation is performed on a leading end or a rear end of the recording medium with respect to the conveying direction, the first stage being for positioning the leading end or the rear end of the recording medium within a range of the second nozzle row, and recording a recording data first region equivalent to a part of recording data of one line by the recording head, using the range of the second nozzle row, in which the recording medium is present at this time or the ranges of the first and second nozzle rows, the second stage being for positioning the leading end or the rear end of the recording medium within a range of the first nozzle row, and recording a recording data second region equivalent to a remaining part of the recording data of one line by the recording head, using the ranges of the first and second nozzle rows, in which the recording medium is present at this time, or the range of the first nozzle row; and

for the recording data first region, using recording data obtained by masking at least a position of each rib of the rib row on the upstream side with respect to the recording medium conveying direction for the entire recording data of one line, and for the recording data second region, using recording data obtained by masking at least a position of each rib of the rib row on the downstream side with respect to the recording medium conveying direction.

4. (Previously amended) An ink jet recording apparatus for performing recording by conveying a recording medium between a recording head for executing recording by discharging recording liquid droplets and a platen disposed to face the recording head, said apparatus comprising:

a first rib row in a direction intersecting a conveying direction of the recording medium, including a plurality of ribs on the platen; and

a second rib row in a direction intersecting the conveying direction of the recording medium, including a plurality of ribs on the platen, the ribs of said second rib row being arranged differently from the ribs of said first rib row, and disposed downstream of said first rib row with respect to the recording medium conveying direction,

wherein a recording operation is performed on a leading end or a rear end of the recording medium, with respect to the conveying direction, by positioning the leading end or the rear end of the recording medium on said first rib row and performing recording except for recording data corresponding to a position of each rib of said first rib row, then positioning the leading end or the rear end of the recording medium in the conveying direction on said second rib row and performing recording except for recording data corresponding to a position of each rib of said second rib row.

5. (Previously amended) An ink jet recording apparatus according to claim 4, wherein absorbing means is provided between ribs of at least one of said first and second rib rows to absorb recording liquid.

6. (Previously amended) An ink jet recording apparatus according to claim 4, wherein in positions equivalent to rough centers between adjacent ribs of said first rib row, ribs of said second rib row are disposed.

7. (Previously amended) An ink jet recording apparatus according to any one of claims 4 to 6, wherein one-line recording by a discharge nozzle row of the recording head is completed by dividing recording data according a position of each rib, and performing at least two or more recording operations accompanied by recording medium conveying in the midway when the recording operation is performed on the leading end or the rear end of the recording medium.

8. (Previously amended) An ink jet recording apparatus according to claim 7, wherein when at least the two or more recording operations are executed accompanied by the recording medium conveying, a conveying amount of the recording medium in the midway is set equal to/lower than half of a length of the discharge nozzle row of the recording head in the recording medium conveying direction.

Claims 9-14 (cancelled)

15. (New) A recording apparatus comprising:
conveying means for conveying a recording medium in a predetermined conveying direction;

a recording head for recording on the recording medium conveyed by said conveying means; and

at least two rib rows for guiding the recording medium conveyed by said conveying means at a position facing said recording head and having a plurality of ribs arranged in a direction intersecting a conveying direction of the recording medium, ribs of one of said rib rows being arranged in a pattern different from a ribs of another of said rib rows,

wherein recording data is divided into a plurality of data blocks so that recording is performed on a leading end or a rear end of the recording medium, with respect to the conveying direction, by a plurality of recording operations performed by positioning the leading end or the rear end of the recording medium on each of said at least two ribs rows, and the recording data is divided into the data blocks so that a recording operation based on each data block is not performed at a portion where the recording medium is superimposed with a rib and a portion corresponding to a vicinity thereof. ...

16. (New) A recording apparatus according to claim 15, wherein said recording head is a serial type ink jet recording head for performing recording by scanning in a main scan direction substantially perpendicular to the conveying direction to discharge ink.

17. (New) A recording apparatus according to claim 16, wherein a total sum of a length of recording images based on a data block in the main scan direction is

longer than a length of a recording image actually recorded on the recording medium in the main scan direction.

18. (New) A recording apparatus according to claim 17, wherein the recording data is divided into the plurality of data blocks so that recording images based on different data blocks have an overlapped region, and when recording based on each data block, at the overlapped region, recording for remaining picture elements is performed except for picture elements having a different arrangement for each data block.

B34
(contd)

19. (New) An ink jet recording apparatus for recording on the same region of a recording medium by scanning a recording head plural times except for recording data of a different arrangement, said apparatus comprising:

conveying means for conveying the recording medium in a predetermined conveying direction;

a recording head for recording on the recording medium conveyed by said conveying means; and

at least two rib rows for guiding the recording medium conveyed by said conveying means at a position facing said recording head and having a plurality of ribs arranged in a direction intersecting a conveying direction of the recording medium, ribs of one of said rib rows being arranged in a pattern different from ribs of another of said rib rows,

B34
(concl.)

wherein recording data is divided into a plurality of data blocks so that recording is performed on a leading end or a rear end of the recording medium, with respect to the conveying direction, by a plurality of recording operations performed by positioning the leading end or the rear end of the recording medium on each of said at least two rib rows, and the recording data is divided into the data blocks so that a recording operation based on each data block is not performed at a portion where the recording medium is superimposed with a rib and a portion corresponding to the vicinity thereof, and

wherein each data block has overlapped region recording data which is recording data for a region overlapping another data block, and recording is performed except for recording data different from the overlapped recording data and the other recording data.
